FACT SHEET FOR STATE WASTE DISCHARGE PERMIT ST-7426
FACILITY NAME: BELLINGHAM COLD STORAGE

This fact sheet is a companion document to the draft State Waste Discharge Permit No. ST-7426. The Department of Ecology (the Department) is proposing to issue this permit, which will allow discharge of screened wastewater to the City of Bellingham Wastewater Treatment Plant (WWTP) at Post Point. This fact sheet explains the nature of the proposed discharge, the Department's decisions on limiting the pollutants in the wastewater, and the regulatory and technical bases for those decisions.

Washington State law (RCW 90.48.080 and 90.48.160) requires that a permit be issued before discharge of wastewater to waters of the state is allowed. This statute includes commercial or industrial discharges to sewerage systems operated by municipalities or public entities which discharge into public waters of the state. Regulations adopted by the state include procedures for issuing permits and establish requirements which are to be included in the permit (Chapter 173-216 WAC).

GENERAL INFORMATION	
Applicant	Mr. Michael Clausen, M & R Manager
Facility Name and Address	BELLINGHAM COLD STORAGE CO. 2825 Roeder Avenue Bellingham, WA 98227 Whatcom County
Type of Facility	Seafood Processing and Cold Storage Warehouses
Facility Discharge Location	Latitude: 48° 45' 46" N Longitude: 122° 30' 57" W
Treatment Plant Receiving Discharge	City of Bellingham, Post Point Pollution Control Facility WA-002374-4
Contact at Facility	Mr. Michael Clausen (360) 733-1640
Responsible Official	Mr. Doug Thomas, President and CEO

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BACKGROUND INFORMATION

DESCRIPTION OF THE FACILITY

Bellingham Cold Storage (BCS) owns and leases processing and cold storage warehouse space on the Squalicum Fill in Bellingham, Washington. Several fish processors currently lease space from BCS. Most of the processors operate under their own state waste discharge permits, discharging screened process wastewater to the Post Point Pollution Control Facility (Bellingham Wastewater Treatment Plant-WWTP). Sources of process wastewater at BCS are seafood processing, thawing, product cleaning, and facility clean-up activities.

HISTORY

Waste discharge permit T-2980 was issued to BCS by the Washington Pollution Control Commission in June of 1968. The permit allowed for 200,000 gallons per day (gpd) of wastewater to be discharged to Squalicum Waterway, with the condition that industrial and domestic waste discharges be connected to the municipal treatment system prior to the third quarter of 1970. BCS hooked up to the municipal sewer system by June 1973.

The Department first issued an NPDES permit to BCS on January 20, 1975. This permit placed interim and final limitations for flow and temperature on industrial and cooling wastewaters discharged to Bellingham Bay at two separate locations. Screened process wastewater discharged to the Bellingham WWTP. There were five permitted outfalls, with two discharging to surface water.

The surface water discharges were eliminated by spring of 2000. The noncontact cooling water used in the cooling of the ammonia compressors in engine rooms 1 & 2 was eliminated by installing closed loop glycol and/or thermal siphon ammonia cooling systems. All noncontact cooling water is evaporated to the atmosphere.

The current permit was issued in September 2000 and expires September 28, 2005. It places a limit on flow and pH and requires monitoring for BOD, TSS. The three indirect discharge points remained designated as outfalls 003, 004, and 005. This permit renumbers those outfalls to 001, 002, and 003 for the sake of data management.

INDUSTRIAL PROCESS

The flow from BCS is very seasonal with a monthly gallon per day (gpd) low of 5,320 gallons in January and a monthly gpd discharge of 127,379 gallons in October (based on 2004 data). The maximum daily water usage can reach up to 200,000 gpd per the permit application, but a substantial amount of water is used on boats and ice making. Wastewater discharge to the Bellingham WWTP averages around 60,000 gpd, per the permit application. Future production may increase so the Permittee requested and was approved for an increased maximum flow cap in the permit.

Process wastewaters from the Fish House, boxing area, and processing area flow to a sump, where it is then pumped over tangential screens prior to entering the Bellingham WWTP system.

All process wastewater, including clean-up water and thawing water, is required to be screened through 20 mesh (0.033 inch) or finer prior to discharge to the Bellingham system.

DISCHARGE OUTFALL

The process wastewater enters the Bellingham system at three locations, previously denoted as: #003, a tangential hydrasieve outside HomePort Seafoods near the northeast corner; #004, a hydrasieve for the Herring and Salmon freezing area; and, #005, screened floor drains in the Fish Boxing area in the center of the complex. This permit redefines the outfalls as:

#001 The tangential screen outside the Fish House (previously #003)
#002 The tangential screen across from the BCS main office (previously #004)
#003 The sump across from the box line.

TREATMENT PROCESSES

Treatment consists of coarse floor grates followed by mesh floor screens and fine mesh hydrasieves at Outfalls #001 and #002, and a screened sump #003.

PERMIT STATUS

The previous permit for this facility was issued on September 28, 2000, with an expiration date of September 28, 2005. Effluent limits were placed on flow and pH. Monitoring and reporting of BOD and TSS were required.

An application for permit renewal was submitted to the Department on May 16, 2005, and accepted by the Department on August 30, 2005.

SUMMARY OF COMPLIANCE WITH THE PREVIOUS PERMIT

The facility last received a permit compliance inspection on November 22, 2004.

During the history of the previous permit, the Permittee has remained in compliance based on Discharge Monitoring Reports (DMRs) and other reports submitted to the Department and inspections conducted by the Department. A review of the past years DMRs shows a daily maximum flow exceedance in October 2004.

WASTEWATER CHARACTERIZATION

The concentration of pollutants in the discharge was reported in discharge monitoring reports. The wastewater discharge is characterized for the following parameters, based on the past years' DMR data:

Parameter	Range	Average
Flow, gpd	6,625-127,379	34,648
pH, standard units	6.8-7.5	7.19
BOD, mg/L	30-750	283
TSS, mg/L	13-330	140

PROPOSED PERMIT LIMITATIONS

State regulations require that limitations set forth in a waste discharge permit must be based on the technology available to treat the pollutants (technology-based) or be based on the effects of the pollutants to the POTW (local limits). Wastewater must be treated using all known, available, and reasonable treatment (AKART) and not interfere with the operation of the POTW.

The more stringent of the local limits-based or technology-based limits are applied to each of the parameters of concern. Each of these types of limits is described in more detail below.

TECHNOLOGY-BASED EFFLUENT LIMITATIONS

All waste discharge permits issued by the Department must specify conditions requiring available and reasonable methods of prevention, control, and treatment of discharges to waters of the state (WAC 173-216-110). The minimum requirements to demonstrate compliance with the AKART standard and specific design criteria for this facility were determined using best professional judgment (BPJ) referencing the Environmental Protection Agency (EPA) contract document, Reassessment of Effluent Limitations Guidelines and New Source Performance Standards for the Canned and Preserved Seafood Processing Point Source Category (1979). The "best conventional pollutant control technology" (BCT) limits recommended in the document were achieved through in-plant changes to reduce water flow and waste loads, in addition to coarse screening (0.75), followed by fine mesh screening, defined as 20 mesh or finer.

There are no pretreatment standards for new or existing sources in the seafood processing industry discharging to a sanitary sewer system listed in 40 CFR Part 408. Because of the problems reported by the Bellingham WWTP (strapping or banding material and fish parts clogging the pumps), AKART for surface water discharges of seafood processing wastewater (screening) will be applied to this indirect discharge unless an equivalent alternative plan is approved by the Department.

EFFLUENT LIMITATIONS BASED ON LOCAL LIMITS

Pollutant concentrations in the proposed discharge with technology-based controls in place will not cause problems at the receiving POTW, such as interference, pass-through, or hazardous exposure to POTW workers and will not result in unacceptable pollutant levels in the POTW's sludge.

Usually the more stringent of the local limits or technology-based limits are applied to each of the parameters of concern discharging to a POTW. Local limits for BOD or TSS have not been developed for the Bellingham WWTP, therefore, monitoring only is required for these parameters.

The pH limit of 5-11 is taken from state regulation, State Waste Discharge Permit Program, WAC 173-216-060. Pollutant concentrations in the proposed discharge with technology-based controls in place will not cause problems at the receiving POTW such as interference, pass-through, or hazardous exposure to POTW workers nor will it result in unacceptable pollutant levels in the POTW's sludge.

COMPARISON OF LIMITATIONS WITH THE EXISTING PERMIT ISSUED 09/28/00

Parameter	Existing Limits	Proposed Limits
Flow	100,000 gpd max.	200,000 gpd
pH	Between 6-11 standard units	Between 6-11 standard units

MONITORING REQUIREMENTS

Monitoring, recording, and reporting are specified to verify that the treatment process is functioning correctly, and that effluent limitations are being achieved (WAC 173-216-110). Outfall #001 is defined as the discharge from the tangential screen outside Fish House. Outfall #002 is defined as the discharge from the tangential screen across from the BCS main office.

The monitoring schedule is detailed in the proposed permit under Condition S2. Specified monitoring frequencies take into account the quantity and variability of the discharge, the treatment method, past compliance, significance of pollutants, and cost of monitoring.

Monitoring for BOD and TSS are being required to further characterize the loadings to the WWTP. These pollutants could have a significant impact on the Bellingham WWTP.

OTHER PERMIT CONDITIONS

REPORTING AND RECORDKEEPING

The conditions of S3 are based on the authority to specify any appropriate reporting and recordkeeping requirements to prevent and control waste discharges (WAC 173-216-110 and 40 CFR 403.12 (e),(g), and (h)).

OPERATIONS AND MAINTENANCE

The proposed permit contains Condition S4 as authorized under Chapter 173-240-150 WAC and Chapter 173-216-110 WAC. It is included to ensure proper operation and regular maintenance of equipment, and to ensure that adequate safeguards are taken so that constructed facilities are used to their optimum potential in terms of pollutant capture and treatment.

PROHIBITED DISCHARGES

Certain pollutants are prohibited from being discharged to the POTW. These include substances which cause pass-through or interference, pollutants which may cause damage to the POTW or harm to the POTW workers (Chapter 173-216 WAC) and the discharge of designated dangerous wastes not authorized by this permit (Chapter 173-303 WAC).

DILUTION PROHIBITED

The Permittee is prohibited from diluting its effluent as a partial or complete substitute for adequate treatment to achieve compliance with permit limitations.

NONROUTINE AND UNANTICIPATED DISCHARGES

Occasionally, this facility may generate wastewater which is not characterized in their permit application because it is not a routine discharge and was not anticipated at the time of application. These typically are waters used to pressure test storage tanks or fire water systems or leaks from drinking water systems. These are typically clean wastewaters but may be contaminated with pollutants. The permit contains an authorization for nonroutine and unanticipated discharges. The permit requires a characterization of these waste waters for pollutants and examination of the opportunities for reuse. Depending on the nature and extent of pollutants in this waste water and opportunities for reuse, Ecology may authorize a direct discharge to the municipality, require the waste water to be placed through the facilities wastewater treatment process or require the water to be reused.

GENERAL CONDITIONS

General Conditions are based directly on state laws and regulations and have been standardized for all industrial waste discharge to POTW permits issued by the Department.

Condition G1 requires responsible officials or their designated representatives to sign submittals to the Department. Condition G2 requires the Permittee to allow the Department to access the treatment system, production facility, and records related to the permit. Condition G3 specifies conditions for modifying, suspending or terminating the permit. Condition G4 requires the Permittee to apply to the Department prior to increasing or varying the discharge from the levels stated in the permit application. Condition G5 requires the Permittee to construct, modify, and operate the permitted facility in accordance with approved engineering documents. Condition G6 prohibits the Permittee from using the permit as a basis for violating any laws, statutes or regulations. Conditions G7 and G8 relate to permit renewal and transfer. Condition G9 requires the Permittee to control production or wastewater discharge in order to maintain compliance with the permit. Condition G10 prohibits the reintroduction of removed pollutants into the effluent stream for discharge. Condition G11 requires the payment of permit fees. Condition G12 describes the penalties for violating permit conditions.

PUBLIC NOTIFICATION OF NONCOMPLIANCE

A list of all industrial users which were in significant noncompliance with Pretreatment Standards or Requirements during any of the previous four quarters may be annually published by the Department in a local newspaper. Accordingly, the Permittee is apprised that noncompliance with this permit may result in publication of the noncompliance.

RECOMMENDATION FOR PERMIT ISSUANCE

This proposed permit meets all statutory requirements for authorizing a wastewater discharge, including those limitations and conditions believed necessary to control toxics. The Department proposes that the permit be reissued for a term of five (5) years.

REFERENCES FOR TEXT AND APPENDICES

Washington State Department of Ecology.

Laws and Regulations (http://www.ecy.wa.gov/laws-rules/index.html)

Permit and Wastewater Related Information
(http://www.ecy.wa.gov/programs/wq/wastewater/index.html)

APPENDICES

APPENDIX A—PUBLIC INVOLVEMENT INFORMATION

The Department has tentatively determined to reissue a permit to Bellingham Cold Storage Co., as described in this fact sheet. The permit contains conditions and effluent limitations which are described in the rest of this fact sheet.

The Department published a Public Notice of Application (PNOA) and Draft (PNOD) on September 10, 2005, in *The Bellingham Herald* to inform the public that a draft permit and fact sheet were available for review. Interested persons were invited to submit written comments regarding the draft permit. The draft permit, fact sheet, and related documents were available for inspection and copying between the hours of 8:00 a.m. and 4:30 p.m. weekdays, by appointment, at the regional office listed below.

Water Quality Permit Coordinator
Department of Ecology
Northwest Regional Office
3190 – 160th Avenue SE
Bellevue, WA 98008

No comments were received.

Further information may be obtained from the Department by telephone, at 425-649-7201, or by writing to the address listed above.

This permit was written by Lori LeVander.

APPENDIX B—GLOSSARY

Average Monthly Discharge Limitation—The average of the measured values obtained over a calendar month's time.

Best Management Practices (BMPs)—Schedules of activities, prohibitions of practices, maintenance procedures, and other physical, structural, and/or managerial practices to prevent or reduce the pollution of waters of the State. BMPs include treatment systems, operating procedures, and practices to control: plant site runoff, spillage or leaks, sludge or waste disposal, or drainage from raw material storage. BMPs may be further categorized as operational, source control, erosion and sediment control, and treatment BMPs.

BOD_5—Determining the Biochemical Oxygen Demand of an effluent is an indirect way of measuring the quantity of organic material present in an effluent that is utilized by bacteria. The BOD_5 is used in modeling to measure the reduction of dissolved oxygen in a-receiving water after effluent is discharged. Stress caused by reduced dissolved oxygen levels makes organisms less competitive and less able to sustain their species in the aquatic environment. Although BOD is not a specific compound, it is defined as a conventional pollutant under the federal Clean Water Act.

Bypass—The intentional diversion of waste streams from any portion of the collection or treatment facility.

Categorical Pretreatment Standards—National pretreatment standards specifying quantities or concentrations of pollutants or pollutant properties which may be discharged to a POTW by existing or new industrial users in specific industrial subcategories.

Compliance Inspection - Without Sampling—A site visit for the purpose of determining the compliance of a facility with the terms and conditions of its permit or with applicable statutes and regulations.

Compliance Inspection - With Sampling—A site visit to accomplish the purpose of a Compliance Inspection - Without Sampling and as a minimum, sampling and analysis for all parameters with limits in the permit to ascertain compliance with those limits; and, for municipal facilities, sampling of influent to ascertain compliance with the 85 percent removal requirement. Additional sampling may be conducted.

Composite Sample—A mixture of grab samples collected at the same sampling point at different times, formed either by continuous sampling or by mixing discrete samples. May be "time-composite" (collected at constant time intervals) or "flow-proportional" (collected either as a constant sample volume at time intervals proportional to stream flow, or collected by increasing the volume of each aliquot as the flow increased while maintaining a constant time interval between the aliquots).

Engineering Report—A document, signed by a professional licensed engineer, which thoroughly examines the engineering and administrative aspects of a particular domestic or industrial wastewater facility. The report shall contain the appropriate information required in WAC 173-240-060 or 173-240-130.

Grab Sample—A single sample or measurement taken at a specific time or over as short period of time as is feasible.

Industrial User—A discharger of wastewater to the sanitary sewer which is not sanitary wastewater or is not equivalent to sanitary wastewater in character.

Industrial Wastewater—Water or liquid-carried waste from industrial or commercial processes, as distinct from domestic wastewater. These wastes may result from any process or activity of industry, manufacture, trade or business, from the development of any natural resource, or from animal operations such as feed lots, poultry houses, or dairies. The term includes contaminated storm water and, also, leachate from solid waste facilities.

Interference—A discharge which, alone or in conjunction with a discharge or discharges from other sources, both:

Inhibits or disrupts the POTW, its treatment processes or operations, or its sludge processes, use or disposal; and

Therefore is a cause of a violation of any requirement of the POTW's NPDES permit (including an increase in the magnitude or duration of a violation) or of the prevention of sewage sludge use or disposal in compliance with the following statutory provisions and regulations or permits issued thereunder (or more stringent State or local regulations): Section 405 of the Clean Water Act, the Solid Waste Disposal Act (SWDA) [including title II, more commonly referred to as the Resource Conservation and Recovery Act (RCRA), and including State regulations contained in any State sludge management plan prepared pursuant to subtitle D of the SWDA], sludge regulations appearing in 40 CFR Part 507, the Clean Air Act, the Toxic Substances Control Act, and the Marine Protection, Research and Sanctuaries Act.

Local Limits—Specific prohibitions or limits on pollutants or pollutant parameters developed by a POTW.

Maximum Daily Discharge Limitation—The highest allowable daily discharge of a pollutant measured during a calendar day or any 24-hour period that reasonably represents the calendar day for purposes of sampling. The daily discharge is calculated as the average measurement of the pollutant over the day.

Pass-through—A discharge which exits the POTW into waters of the-State in quantities or concentrations which, alone or in conjunction with a discharge or discharges from other sources, is a cause of a violation of any requirement of the POTW's NPDES permit (including an increase in the magnitude or duration of a violation), or which is a cause of a violation of State water quality standards.

pH—The pH of a liquid measures its acidity or alkalinity. A pH of 7 is defined as neutral, and large variations above or below this value are considered harmful to most aquatic life.

Potential Significant Industrial User—A potential significant industrial user is defined as an Industrial User which does not meet the criteria for a Significant Industrial User, but which discharges wastewater meeting one or more of the following criteria:

a. Exceeds 0.5 % of treatment plant design capacity criteria and discharges <25,000 gallons per day; or

b. Is a member of a group of similar industrial users which, taken together, have the potential to cause pass-through or interference at the POTW (e.g., facilities which develop photographic film or paper, and car washes).

The Department may determine that a discharger initially classified as a potential significant industrial user should be managed as a significant industrial user.

Significant Industrial User (SIU) ─

1) All industrial users subject to Categorical Pretreatment Standards under 40 CFR 403.6 and 40 CFR Chapter I, Subchapter N; and

2) Any other industrial user that: discharges an average of 25,000 gallons per day or more of process wastewater to the POTW (excluding sanitary, non-contact cooling, and boiler blow-down wastewater); contributes a process wastestream that makes up 5 percent or more of the average dry weather hydraulic or organic capacity of the POTW treatment plant; or is designated as such by the Control Authority* on the basis that the industrial user has a reasonable potential for adversely affecting the POTW's operation or for violating any pretreatment standard or requirement [in accordance with 40 CFR 403.8(f)(6)].

Upon finding that the industrial user meeting the criteria in paragraph 2, above, has no reasonable potential for adversely affecting the POTW's operation or for violating any pretreatment standard or requirement, the Control Authority* may at any time, on its own initiative or in response to a petition received from an industrial user or POTW, and in accordance with 40 CFR 403.8(f)(6), determine that such industrial user is not a significant industrial user.

*The term "Control Authority" refers to the Washington State Department of Ecology in the case of non-delegated POTWs or to the POTW in the case of delegated POTWs.

Slug Discharge─Any discharge of a non-routine, episodic nature, including but not limited to an accidental spill or a non-customary batch discharge to the POTW. This may include any pollutant released at a flow rate which may cause interference with the POTW.

State Waters─Lakes, rivers, ponds, streams, inland waters, underground waters, salt waters, and all other surface waters and watercourses within the jurisdiction of the state of Washington.

Technology-based Effluent Limit─A permit limit that is based on the ability of a treatment method to reduce the pollutant.

Total Suspended Solids (TSS)─Total suspended solids is the particulate material in an effluent. Large quantities of TSS discharged to a-receiving water may result in solids accumulation. Apart from any toxic effects attributable to substances leached out by water, suspended solids may kill fish, shellfish, and other aquatic organisms by causing abrasive injuries and by clogging the gills and respiratory passages of various aquatic fauna. Indirectly, suspended solids can screen out light and can promote and maintain the development of noxious conditions through oxygen depletion.